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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|-------------|----------------------|----------------------|------------------|
| 09/919,619 | 08/01/2001 | Christian Criegee | P 281519 / 000319 OC | 2502 |
| 909 | 7590 | 04/09/2004 | EXAMINER | |
| PILLSBURY WINTHROP, LLP | | | GRAY, JILL M | |
| P.O. BOX 10500 | | | ART UNIT | PAPER NUMBER |
| MCLEAN, VA 22102 | | | 1774 | |

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,619

Applicant(s)

CRIEGEE ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-9,11 and 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9,11 and 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-9, 11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haller et al, 1,886,480 (Haller) in view of "Flame Retardant Cellulose", Sello, et al, (hereinafter Sello) for reasons of record.

Claims 1-4, 6-9, 11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheibli et al, 6,036,731 (Scheibli) in view of "Flame Retardant Cellulose", Sello et al, (Sello, as applied above), for reasons of record.

Response to Arguments

Applicant's arguments filed March 19, 2004 have been fully considered but they are not persuasive.

Applicants argue that there is no disclosure or suggestion of a method for the permanent flameproof finishing of cellulosic fibers or articles containing cellulosic fibers in the teachings of Haller, further arguing that there is no disclosure or suggestion that the dyestuff compounds should be used in an amount to provide nitrogen content, relative to the finished cellulose of at least 1% or at least 2% or from 2 or 3 to 7% by weight because the amounts of dyestuff used in the example of Haller would not provide at least 1% by weight of nitrogen relative to the finished cellulose.

Agreeably Haller does not specifically teach "permanent flameproof finishing of cellulosic fiber or articles containing cellulosic fibers". Nevertheless, Haller clearly teaches treating cellulosic fibers and articles containing cellulosic fibers with compounds that are substantially similar to that contemplated by applicants. Furthermore, it is the examiner's position that "where the substance is unpatentable under 35 U.S.C. 103, is immaterial that applicant may have disclosed an obvious or unobvious further purpose or advantage for the substance. See *in re Graf*, 145 USPQ 197 (CCPA 1965); *In re Finstewald*, 168 USPQ 530 (CCPA 1971). As to the nitrogen content, there is no factual evidence of record that the amounts used by Haller do not provide at least 1% by weight of nitrogen relative to the finished cellulose.

Applicants argue that the disclosure of flame retardant cellulose by Sello would not have motivated the practitioner to modify the disclosure of Haller nor would there have been any expectation of success in achieving the objective of Haller, namely, a dyed cellulosic material, further arguing that the passing of approximately forty years between the filing of Haller and the publication of Sello and the further span of thirty

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years between the publication of Sello and the filing of the present application is itself strong evidence that the practitioner of ordinary skill in the art at the time the invention was made did not consider there disparate disclosures to be relevant to each other or suggestive of the presently claimed invention.

It is the examiner's position that "the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art." *In re Bozek*, 163 USPQ 545 (CCPA 1969). In the instant case, treating cellulose fibers with a cyanuric chloride is well known in the art. Hence, the combination of references would have fairly suggested treating cellulosic fibers with a cyanuric chloride derivative of the type contemplated by applicants. In response to applicant's argument based upon the age of the references, contentions that the reference patents are old are not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references. See *In re Wright*, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977).

Applicants argue that the process and products of Scheibli would not result in a method wherein the compound of formula I or II corresponds to a nitrogen content of at least 1 or 2 wt% relative to the finished cellulose.

In this regard, there is no factual evidence of record that the nitrogen content of Scheibli does not have the claimed critical nitrogen content.

Applicants argue that the examiner has proposed that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation", further arguing that this statement is not seen to apply to the present situation. Applicants additionally argue that optimizing for the purposes of crosslinking to impart permanent finish effects would not reasonably be expected to lead to the method or products of the present invention.

In this regard, the examiner's remarks were in relation to the degree of crosslinking, which is known to be optimizable commensurate with the desired properties of the end product.

Applicants argue that the substituents of Sello do not include the substituents which may be present within the scope of the present claims, further arguing that when viewed with the proper perspective, Sello does not disclose anything about the fire retardancy of the compounds of Scheibli other than the polymethylolated triazine compounds.

In this regard, the teachings of Sello are relied upon for all that he would have reasonably imparted to one of ordinary skill in the art at the time the invention was made, namely, that the addition of phosphorus compounds to triazine derivatives is known in the art in the production of flame retardant cellulose articles.

Therefore, when considered as a whole, the examiner's position remains that the combined teachings of Haller and Sello and Scheibli and Sello would have rendered obvious the invention as claimed in the present claims.

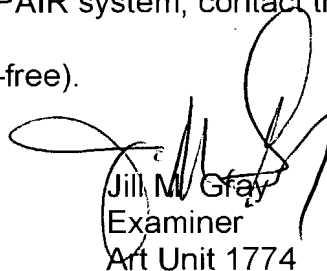
No claims are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Examiner
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jmg